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AUTHOR Arreola, Carlos; And Others
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ABSTRACT

The relationship of locus of control to undecided college students' satisfaction with a self-administered vocational counseling treatment and an interview-oriented counseling treatment was studied. It was predicted that internally oriented students would be more satisfied with the self-administered treatment, while externally oriented students would be more satisfied with a counselor-mediated treatment. A sample of 160 students was given the Rotter Internal-External Scale, alternately the Self-Directed Search (SDS) or Vocational Preference Inventory (VPI), and a previously used satisfaction questionnaire. No significant relationship was found between locus of control and students' level of satisfaction with either treatment. These findings indicated no support for the hypothesis that locus of control is a discriminating variable mediating satisfaction with a self-administered or an interview-oriented vocational counseling treatment. (Author)

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# A STUDY OF THE RELATIONSHIP BETWEEN LOCUS OF CONTROL AND SATISFACTION WITH TWO VOCATIONAL COUNSELING TREATMENTS

Carlos Arreola, Ph.D.

Northwest Regional Laboratory

Portland, Oregon

E. Thomas Dowd, Ph.D.

and

Robert C. Reardon, Ph.D.

Associate Professors

Human Services and Studies

Florida State University

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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# A STUDY OF THE RELATIONSHIP BETWEEN LOCUS OF CONTROL AND SATISFACTION WITH TWO VOCATIONAL COUNSELING TREATMENTS

The increased demand for vocational guidance and counseling services in recent years has led to a greater use of self-help, programmed materials in comparison to counselor-mediated interventions. Research by Gilbert and Ewing (1971), Graff, Danish and Austin (1972), Norman (1969), Holland (1974), and Krivatsy and Magoon (1976) suggests that much of what is included in vocational counseling can be handled by mechanical or self-help devices.

However, little or no reported research has explored the differential impact of client variables and self-help versus counseling approaches. Given the possibility that vocationally undecided students may be more anxious (Walsh & Lewis, 1972), more dependent (Ashby, Wall & Osipow, 1966), and less self-directed (Marr, 1965), the possibility exists that they may not react positively to a self-help approach. Moreover, the notion of "locus of control" (Rotter, 1966), suggests that the individual's perception of his/her own ability to influence their future might be related to differential satisfaction with self-help versus counseling interventions.

Arlin (1975) suggested that the locus of control construct might be a critical psychological variable that mediates the degree of student satisfaction with structured and unstructured learning experiences. Externally- oriented individuals perceive reinforcement or consequences of their actions as somewhat unrelated. They may think that most of what happens to them is outside of their influence or control - - it is external. On the other hand, internals perceive that reinforcement is

contingent on their behavior - - they have control over what happens in their lives. In relation to career development, internals have higher vocational aspirations (Johnson, 1973; Burlin, 1976) and higher vocational maturity (Thomas, 1975).

In a related study, Byrne (in press) found that internals were significantly more satisfied with the Self-Directed Search (Holland, 1977) than were externals. However, the satisfaction measure consisted of only one item, and there was no comparison with another treatment intervention. The purpose of the present study was to extend and clarify the results found by Byrne (in press).

The search reported here attempted to determine if locus of control is correlated with students' preferences for a self-help vocational counseling treatment versus an interview-oriented vocational counseling treatment. The self-administered treatment utilized the Self-Directed Search (Holland, 1977), while the interview-oriented counseling treatment required that a counselor administer, score, and interpret the Vocational Preference Inventory (Holland, 1958). The study assumed that locus of control was a mediating variable in the degree of satisfaction with the two types of vocational counseling treatments. It was hypothesized that internally controlled individuals are more independently oriented and will be more satisfied with a self-administered treatment. Conversely, it was hypothesized that externally controlled individuals are more dependently oriented and will be more satisfied with an interview-oriented vocational counseling treatment that is administered, scored, and interpreted by a counselor.

## Method

### Subjects

The subjects were vocationally undecided freshmen utilizing the Advising Center for Undeclared Majors at a large state university in the Fall Quarter, 1977. All subjects were volunteers and were assigned to the two locus of control groups according to their scores on Rotter's I-E scale (Rotter, 1966). The sample was divided at the median, with subjects scoring nine and below designated "internal" (N=70) and those scoring ten and above designated "external" (N=90). The sample consisted of 160 students, 67 male and 93 female, from a population of 300 students assigned to the advising office. Subjects were alternately assigned to either the self-administered (SDS) or the interview-oriented (VPI) treatment groups.

### Procedure

The treatments were administered at the Advising Center for Undeclared Majors. The students were asked to volunteer for a study of vocational counseling procedures when they came in for academic advisement. They were informed that they would be participating in a research study, which would take approximately one and one-half hours. The first step was the administration of the Rotter I-E scale. The students were then alternately assigned to take either the SDS or the VPI. The students who took the SDS were given the last two pages of the test booklet, which included the summary code. The students who took the VPI met with a counselor for one interview session for interpretation of the results. During this session, the counselor described the VPI scales and discussed

the scores in light of the student's vocational ambitions. After the interview, the counselor gave the student a summary code comprised of the VPI's first six scales, and a list of relevant occupations. The students in both groups were then asked to fill out the Student Opinion Form, a satisfaction questionnaire adapted from an instrument developed by Zener & Schnuelle (1972) and used in previous research (Krivatsy & Magoon, 1976).

Five weeks after the administration of the treatments, the students were contacted with a follow-up letter and asked to complete the Student Opinion Form again. This was done to identify any changes in the students' satisfaction with the treatments over time. No students were lost on follow-up.

## Results

In order to determine if the method of counseling and the locus of control had an effect on the satisfaction level, a 2 x 2 Analysis of Variance was employed ($p$ .05, $df$ = 159). The results showed that the main effects of treatment and locus of control were not significant, nor was there a significant interaction.

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Insert Table 1 about here

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In order to determine possible reasons for the lack of significance of the analysis of variance, additional post-hoc supplemental statistical analyses of the data were conducted, using procedures suggested by Siegel (1956). Distribution differences on the Student Opinion Form items between VPI and SDS respondents were tested using Chi-square.

Among the individual items on the initial satisfaction measure and the follow-up satisfaction measure, there were no significant differences in the distribution of scores between students taking the VPI and those taking the SDS. These results are shown in Table 1. A Chi-square was also used to determine if there were distribution differences on individual items of the Student Opinion Form between internal and external scores on the I-E scale. There were no significant differences in the distribution of scores between internally and externally controlled students. These results are shown in Table 2.

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Insert Table 2 about here

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It was also found that there was no significant difference in subject satisfaction between the two treatments when the extreme scores on the I-E scale were used. The extreme scores were analyzed because 50% of the students had scores which fell between 7 and 12; i.e., within three points of Rotter's cutoff for the I-E scale. Thus, the scores six and below were designated extreme internal scores and the scores 13 and above were designated extreme external scores. A Chi-square test comparing extreme scores on level of satisfaction was not significant ($X = 5.63$, $df = 6$). Therefore, the Rotter I-E scale was not a factor in differentiating between subjects on satisfaction with a self-administrated or interview - oriented treatment, even for extreme scores.

The results indicated that the majority of both internally and externally controlled students were satisfied with the SDS and VPI. Of those taking the SDS, 63.53% of the internally controlled subjects and

56.08% of the externally controlled subjects reported satisfaction with the instrument. Of those taking the VPI, 55.00% of the internally controlled subjects and 56.56% of the externally controlled subjects reported satisfaction with the instrument. Furthermore, the five week follow-up showed an increase to 72.00% satisfaction for internals and 61.35% satisfaction for externals (SDS) and 63.53% for internals and 56.09% for externals (UPI). The increase in the level of satisfaction of follow-up scores over termination scores was significant ($T = 2.07$, $P. = .05$).

## Discussion

The results of this study did not substantiate the assumption that internally controlled students would be more satisfied with a self-help vocational counseling treatment and externally controlled students would be more satisfied with an interview - oriented approach. This suggests that the locus of control construct may not be a factor in determining satisfaction with self-help versus interview-oriented treatments, thus contradicting Byrne's (in press) findings. However, the present study used a more detailed measure of satisfaction, along with a comparison with another treatment.

Such a finding provides additional support for a broader use of self-help vocational guidance approaches with undecided college students. The fear that less assertive, other-directed persons might dislike a self-help vocational guidance program seems unwarranted. Moreover, the lower cost of materials such as the SDS, in comparison with counselor-mediated services, suggests the economic advantages of self-help techniques. In sum, the results affirm Magoon's (1969) suggestion that self-administered instruments be used as an alternative to interview-oriented approaches

in providing services to larger numbers of the population at a lower cost.

In this regard, it is important to note that a majority of the undecided students were satisfied with their treatment, regardless of which approach was used. Furthermore, these satisfaction scores tended to increase over time, rather than diminishing, as is often the case in follow-up studies. While it is difficult to explain this, perhaps the students in both groups were able to use the information gained in their respective treatments in making real life decisions. Satisfaction with their treatments would thus be expected to increase.

Supplementary analyses of the data could discover no extraneous reasons why the analysis of variance was not significant. In particular, the analysis of extreme scores on the Rotter I-E scale was unable to demonstrate a significant difference between external and internal subjects. It therefore appears that the locus of control construct may not be a factor in mediating satisfaction with a self-help or counselor-mediated vocational guidance instrument.

Future studies are now needed to further explore the relationship of individual differences, satisfaction, and effectiveness of varied career guidance interventions. Such person variables as age, race, self-esteem, career maturity, degree of career decidedness, and intelligence might be examined in relation to differential effectiveness of the SDS. Outcome variables, such as frequency of information seeking behavior and congruence of personality and occupational choices, might also be explored with reference to individual differences and treatment effectiveness. Research of this nature is necessary in order to more fully understand the bases for individual differences in reactions to the SDS and other career guidance programs.

References

Arlin, M. The interaction of locus of control, classroom structure, and pupil satisfaction. Psychology in the Schools, 1975, 12, 279-286.

Ashby, J. D., Wall, H. W. & Osipow, S. H. Vocational certainty and indecision in college freshmen. Personnel and Guidance Journal, 1966, 44, 1037-1041.

Byrne, T. P. The relationship between locus of control, differentiation, and self-esteem and client satisfaction with Holland's Self-Directed Search. Journal of College Student Personnel, in press.

Burlin, F. D. Locus of control and female occupational aspirations. Journal of Counseling Psychology, 1976, 23, 126-129.

Gilbert, M., & Ewing, T. N. Programmed versus face-to-face counseling. Journal of Counseling Psychology, 1971, 18, 413-421.

Graff, R. W., Danish, S., and Austin, B. Student reactions to three kinds of vocational-educational counseling. Journal of Counseling Psychology, 1972, 19, 244-228.

Holland, J. L. A personality inventory employing occupation titles. Journal of Applied Psychology, 1958, 42, 336-342.

Holland, J. L. Some practical remedies for providing vocational guidance for everyone. Educational Researcher, 1974, 3, 9-15.

Holland, J. L. A Counselor's Guide for Use with the Self-Directed Search: A Guide to Educational and Vocational Planning. Palo Alto, Calif.: Consulting Psychologists Press, 1971.

Holland J. L. The Self-Directed Search: A Guide to Educational and Vocational Planning. Palo Alto, Calif.: Consulting Psychologists Press, 1977.

Johnson, C. H. A comparative study of self-help versus individual educational-vocational counseling for college students (Doctoral dissertation, Southern Illinois University, 1973). Dissertation Abstracts International, 1974, 34, 56 3A.

Krivatsy, S. E. & Magoon, T. M. Differential effects of three vocational counseling treatments. Journal of Counseling Psychology, 1976, 23, 112-118.

Norman, R. F. The use of preliminary information in vocational counseling. Personnel and Guidance Journal, 1969, 47, 693-697.

Rotter, J. B. Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 1966, 80, (Whole No. 609).

Siegel, S. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill, 1956.

Thomas, M. J. An examination of the relationship between locus of control, and vocational maturity, choice realism, and job knowledge among low socioeconomic status black and white youth. Dissertation Abstracts International, 1975, Vol. 35 (7-A), 4264-4265.

Walsh, W. B. & Lewis, R. O. Consistent, inconsistent, and undecided career preferences and personality. Journal of Vocational Behavior, 1972, 2, 209-316.

Zener, T. B., and Schnuelle, L. An Evaluation of the Self-Directed Search (Research Report No. 124). Baltimore, Maryland: Center for Social Organization of Schools, Johns Hopkins University, 1972. (ERIC Document Reproduction Service No. ED. 061458).

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Table 2

Raw Frequency Distributions of Satisfaction and

Follow-Up Satisfaction Questionnaires by I-E Scale Scores

| Questions | Locus of Control | Response | | | | | $X^{2*}$ |
|---|---|---|---|---|---|---|---|
| | | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | |
| **Termination** | | | | | | | |
| 1. I feel more sure about my occupational choice now than I did before taking the VPI/SDS. | Internal | 5 | 11 | 24 | 28 | 4 | 6.92 |
| | External | 5 | 11 | 47 | 21 | 4 | |
| 2. I see now that my first choice may not be the best choice for me. | Internal | 4 | 21 | 27 | 19 | 1 | 2.15 |
| | External | 3 | 20 | 35 | 23 | 3 | |
| 3. I see more occupational choices now than I did before taking the VPI/SDS. | Internal | 2 | 11 | 9 | 40 | 10 | 1.96 |
| | External | 1 | 9 | 10 | 52 | 16 | |
| 4. I would recommend taking the VPI/SDS to a friend who wanted vocational guidance. | Internal | 1 | 1 | 7 | 49 | 14 | 2.07 |
| | External | - | 2 | 8 | 56 | 22 | |
| 5. My VPI/SDS summary code seems reasonable for me. | Internal | 3 | 7 | 10 | 43 | 9 | 5.40 |
| | External | 2 | 9 | 25 | 42 | 10 | |
| **Follow-Up** | | | | | | | |
| 1. I feel more sure about my occupational choice now than I did before taking the VPI/SDS. | Internal | - | 4 | 13 | 11 | 2 | 2.43 |
| | External | - | 9 | 16 | 26 | 7 | |
| 2. I see now that my first choice may not be the best choice for me. | Internal | - | 7 | 8 | 13 | 2 | 3.02 |
| | External | 1 | 10 | 24 | 18 | 5 | |
| 3. I see more occupational choices now than I did before taking the VPI/SDS. | Internal | - | 4 | 1 | 18 | 7 | 6.14 |
| | External | 1 | 2 | 9 | 31 | 15 | |
| 4. I would recommend taking the VPI/SDS to a friend who wanted vocational guidance. | Internal | - | 2 | 4 | 14 | 10 | 4.82 |
| | External | - | - | 5 | 34 | 19 | |
| 5. My VPI/SDS summary code seems reasonable for me. | Internal | - | 2 | 6 | 19 | 3 | 0.94 |
| | External | 1 | 4 | 14 | 35 | 4 | |

*$df = 4, \alpha = .05, X^2 \geq 9.49$.

Table 1

Raw Frequency Distributions of Satisfaction and Follow-Up Satisfaction Questionnaires

| Questions | Treatments | Response: Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | $X^{2*}$ |
|---|---|---|---|---|---|---|---|
| **Termination** | | | | | | | |
| 1. I feel more sure about my occupational choice now than I did before taking the VPI/SDS. | VPI | 7 | 12 | 34 | 22 | 5 | 2.92 |
| | SDS | 3 | 10 | 37 | 27 | 3 | |
| 2. I see now that my first choice may not be the best choice for me. | VPI | 4 | 23 | 30 | 21 | 2 | 1.30 |
| | SDS | 3 | 18 | 36 | 21 | 2 | |
| 3. I see more occupational choices now than I did before taking the VPI/SDS. | VPI | 2 | 15 | 7 | 46 | 10 | 8.03 |
| | SDS | 1 | 5 | 12 | 46 | 16 | |
| 4. I would recommend taking the VPI/SDS to a friend who wanted vocational guidance. | VPI | - | 2 | 6 | 55 | 17 | 2.28 |
| | SDS | 1 | 1 | 9 | 50 | 19 | |
| 5. MY VPI/SDS summary code seems reasonable for me. | VPI | 1 | 8 | 20 | 39 | 12 | 4.41 |
| | SDS | 4 | 8 | 15 | 46 | 7 | |
| **Follow-Up** | | | | | | | |
| 1. I feel more sure about my occupational choice now than I did before taking the VPI/SDS. | VPI | - | 8 | 12 | 19 | 3 | 2.40 |
| | SDS | - | 5 | 17 | 18 | 6 | |
| 2. I see now that my first choice may not be the best choice for me. | VPI | - | 8 | 18 | 13 | 3 | 2.33 |
| | SDS | 1 | 9 | 14 | 18 | 4 | |
| 3. I see more occupational choices now than I did before taking the VPI/SDS. | VPI | - | 4 | 4 | 26 | 8 | 3.71 |
| | SDS | 1 | 2 | 6 | 23 | 14 | |
| 4. I would recommend taking the VPI/SDS to a friend who wanted vocational guidance. | VPI | - | 1 | 4 | 24 | 13 | 0.24 |
| | SDS | - | 1 | 5 | 24 | 16 | |
| 5. My VPI/SDS summary code seems reasonable for me. | VPI | 1 | 4 | 9 | 27 | 1 | 5.27 |
| | SDS | - | 2 | 11 | 27 | 6 | |

*df = 4, $\alpha$ = .05, $X^2 \geq 9.49$.